FORM PTO-1449 (Page 2) U.S. Department of Commerce Patent and Trademark Office	Docket No. (Optional) INVIT1250-4	Serial No.: 09/825,852	#8
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## **U.S. PATENT DOCUMENTS**

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	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE	<i>3</i> 0
AA	4,959,309	09/25/1990	Dattagupta et al.	435	6		
AB	5,207,163	12/1993	Gold et al.	435	6		
AC	5,270,170	12/14/1993	Schatz et al.	435	7.37		
AD	5,475,096	12/1995	Gold et al.	536	26		
AE	5,510,240	04/23/1996	Lam et al.	435	7.1		.*
AF	5,660,985	08/1997	Pieken et al.	435	6		,
AG	5,683,867	11/1997	Biesecker et al.	435	6		
AH	5,705,337	01/1998	Gold et al.	435	6		
AI	5,739,305	04/23/1996	Cubicciotti et al	536	23.1		
	AB AC AD AE AF AG AH	NUMBER  AA 4,959,309  AB 5,207,163  AC 5,270,170  AD 5,475,096  AE 5,510,240  AF 5,660,985  AG 5,683,867  AH 5,705,337	DOCUMENT NUMBER         DATE           AA         4,959,309         09/25/1990           AB         5,207,163         12/1993           AC         5,270,170         12/14/1993           AD         5,475,096         12/1995           AE         5,510,240         04/23/1996           AF         5,660,985         08/1997           AG         5,683,867         11/1997           AH         5,705,337         01/1998	DOCUMENT NUMBER         DATE         NAME           AA         4,959,309         09/25/1990         Dattagupta et al.           AB         5,207,163         12/1993         Gold et al.           AC         5,270,170         12/14/1993         Schatz et al.           AD         5,475,096         12/1995         Gold et al.           AE         5,510,240         04/23/1996         Lam et al.           AF         5,660,985         08/1997         Pieken et al.           AG         5,683,867         11/1997         Biesecker et al.           AH         5,705,337         01/1998         Gold et al.	DOCUMENT NUMBER         DATE         NAME         CLASS           AA         4,959,309         09/25/1990         Dattagupta et al.         435           AB         5,207,163         12/1993         Gold et al.         435           AC         5,270,170         12/14/1993         Schatz et al.         435           AD         5,475,096         12/1995         Gold et al.         536           AE         5,510,240         04/23/1996         Lam et al.         435           AF         5,660,985         08/1997         Pieken et al.         435           AG         5,683,867         11/1997         Biesecker et al.         435           AH         5,705,337         01/1998         Gold et al.         435	DOCUMENT NUMBER         DATE         NAME         CLASS         SUBECT CLASS           AA         4,959,309         09/25/1990         Dattagupta et al.         435         6           AB         5,207,163         12/1993         Gold et al.         435         6           AC         5,270,170         12/14/1993         Schatz et al.         435         7.37           AD         5,475,096         12/1995         Gold et al.         536         26           AE         5,510,240         04/23/1996         Lam et al.         435         7.1           AF         5,660,985         08/1997         Pieken et al.         435         6           AG         5,683,867         11/1997         Biesecker et al.         435         6           AH         5,705,337         01/1998         Gold et al.         435         6	DOCUMENT NUMBER         DATE         NAME         CLASS         SUB-FILING DATE           AA         4,959,309         09/25/1990         Dattagupta et al.         435         6           AB         5,207,163         12/1993         Gold et al.         435         6           AC         5,270,170         12/14/1993         Schatz et al.         435         7.37           AD         5,475,096         12/1995         Gold et al.         536         26           AE         5,510,240         04/23/1996         Lam et al.         435         7.1           AF         5,660,985         08/1997         Pieken et al.         435         6           AG         5,683,867         11/1997         Biesecker et al.         435         6           AH         5,705,337         01/1998         Gold et al.         435         6

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EXAM. INITIALS		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION (YES/NO)
mar	AJ	2 183 661	06/1987	UK	C12N	15/00	
NCT	AK	WO 89/06694	07/1989	wo	C12P	21/00	

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mas	AL	WO 91/14696	10/1991	WO	C07H	17/00	
	AM	WO 92/14843	09/1992	wo	C12Q	1/68	
	AN	WO 95/07364	03/1995	wo	C12Q	1/68	
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	AS	WO 96/04403	02/1996	wo	C12Q	1/68	
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mer	AV	WO 96/27605	09/1996	wo	С07Н	21/02	
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MC6	AW	Abelson, J. "Directed Evolution of nucleic acids by independent replication and selection" <i>Science</i> <b>249</b> : 488-489 (1990)
	AX	Bartel, D.P. and Szostak, J.W. "Isolation of new ribozymes from a large pool of random sequences" <i>Science</i> <b>261</b> :1411-1418 (1993)
NO	AY	Beaudry, A.A. and Joyce. G.F "Directed Evolution of an RNA Enzyme" Science 257: 635-641 (1992)

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M	W	AZ	Cech, T.R. "The chemistry of self-splicing RNA and RNAEnzymes" <i>Science</i> <b>236</b> : 1532-1539 (1987)
		BA	Conrad, R. et al. "Isozyme-specific inhibition of protein kinase C by RNA aptamers" <i>J. Biol. Chem.</i> <b>269</b> : 32051-32054 (1994)
		BB	Crouch, G.J. and Eaton, B.E. "Synthesis of 2'-deoxyuridine nucleosides with appended 5-position carbonyl cross-linking groups" <i>Nucleosides &amp; Nucleotides</i> 13: 939-944 (1994)
		ВС	Dewey, T.M. et al. "New uridine derivatives for systematic evolution of RNA ligands by exponential enrichment" <i>J. Am. Chem. Soc.</i> <b>117:</b> 8474-8475 (1995)
		BD	Ellington, A.D. and Szostak, J. W. Abstract of papers presented at the 1990 meeting on RNA Processing. Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, p226 (1990)
		BE	Freier, S.M. et al. "Mutational SURF: A strategy for improving lead compounds identified from combinatorial libraries" <i>Bioorganic &amp; Medicinal Chemistry</i> <b>4:</b> 717-725 (1996)
		BF	Jensen, K.B. et al. "Characterization of an in vitro selected RNA ligand to the HIV-1 rev protein" J. Mol. Biol. 235:237-247 (1994)
		BG	Joyce, G.F. "Amplification, mutztion and selection of catalytic RNA" Gene 82:83-87 (1989)
		вн	Joyce, G.F. and Inoue, T. "A novel technique for the rapid preparation of mutant RNAs"
			Nucleic Acids Research 17:711-714 (1989)
M	<b>₹</b>	BI	Kinzler, K.W. and Vogelstein, B. "Whole genome PCR: Application to the identification of sequences bound by gene regulatory proteins" <i>Nucleic Acids Research</i> 17:3645-3653 (1989)

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mes	Ryamer, F.R. et al. "Evolution in vitro: sequence and phenotype of a mutant RNA resistant to Ethidium Bromide" J. Mol. Biol. 89: 719-736 (1974)	
	BK	Latham, J.A. et al. "The application of a modified nucleotides in aptamer selection: novel thrombin aptamers containing 5-(1-Pentyny)-2'-deoxyuridine" <i>Nucleic Acids Research</i> 22: 2817-2822(1994)
	BL	Lestienne, P and Bieth, J.G. "Inhibtion of human leucocyte elastate by polynucleotides" <i>Biochimie</i> 65: 49-52 (1983)
	ВМ	Levisohn, R. and Spiegelman, S. "The Cloning of a self-replicating RNA molecule" <i>Proc. Natl. Acad. Sci. USA</i> <b>60</b> : 866-872 (1968)
	BN	Levisohn, R. and Spiegelman, S. "Further extracellular Darwinian experiments with replicating RNA Molecules: diverse variants isolated under different selective conditions" <i>Proc. Natl. Acad. Sci. USA</i> <b>63:</b> 805-811 (1969)
	ВО	Lorsch, J.R. and Szostak, J.W. "In Vitro Evolution of new ribozymes with polynucleotide kinase activity" <i>Nature</i> <b>371:</b> 31-36 (1994)
	BP	Ma, M.Y. et al. "design and synthesis of RNA miniduplexes via a synthetic linker approach" biochemistry
	BQ	Maxam, A.M. and Gillbert, W. "A new method for sequencing DNA" <i>Proc. Natl. Acad. Sci. USA</i> <b>74:</b> 560-564 (1977)
V	BR	McCorkle, G.M. and Altman, S. "RNA's as catalysts" <i>Journal of Chemical Education</i> <b>64:</b> 221-226 (1987)
Ner	BS	Nelson, J et al. "Incorporation of a non-nucleotide bridge into hairpin oliggonucleotides capable of high-affinity binding to the rev protein of HIV-1" <i>Biochemistry</i> <b>35:</b> 5339-5344 (1996)

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μ	6	ВТ	Oleksyszyn, J. and Powers, J.C. "Irreversible inhibition of serine proteases by peptide derivatives of (a-Aminoalkyl)phosphonate diphenyl esters" <i>Biochemical and Biophysical Research Communications</i> <b>161:</b> 143-149 (1989).
		BU	Oleksyszyn, J. and Powers, J.C. "Irreversible inhibition of serine proteases by peptide derivatives of (a-Aminoalkyl)phosphonate diphenyl esters" <i>Biochemistry</i> <b>30:</b> 485-493 (1991)
		BV	Oliphant, A.R. et al. "Cloning of random-sequence oligodeoxynucleotides" <i>Gene</i> 44: 177-183 (1986)
		BW	Oliphant, A.R. and Struhl, K. "The use of random-sequence oligonucleotides for determining consensus sequences" <i>Methods in Enzymology</i> <b>155</b> : 568-582 (1987)
		BX -	Oliphant, A.R. and Struhl, K. "Defining the consensus of <i>E.Coli</i> .promoter elements by random selection" <i>Nucleic Acids Research</i> <b>16:</b> 7673-7683 (1988)
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		BZ	Pan, T. and Unlenbeck, O.C. "In vitro selection of RNAs that undergo autolytic cleavage with Pb" <i>Biochemistry</i> <b>31</b> : 3887-3895 (1992)
		CA	Piccirilli, J.A. et al. "Aminoacyl esterase activityof the Tetrahymena Ribozyme" Science
			<b>256:</b> 1420-1424 (1992)
V	/	СВ	Prudent, J.R. et al. "Expanding the scope of RNA catalysis" Science 264: 1924-1927 (1994)
W	06	CC	Ren, X.F. et al. "Formation of stable DNA loops by incorporation of nonpolar, non-hydrogen-bonding nucleoside isosteres" <i>Angew. Chem. Int. Ed. Engl.</i> <b>35:</b> 743-746 (1996)

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	Τ,	D. L. A. D. L. and Javes C. E. "Salastian in wints of an DNA angume that specifically
mç	CI حر	Robertson, D.L. and Joyce, G.F. "Selection <i>in virto</i> of an RNA enzyme that specifically cleaves single-stranded DNA" <i>Nature</i> <b>344</b> :467-468 (1990)
	CE Sakthivel, et al. "Expanding the potential of DNA for binding and catelysis: highly functionalized dUTP derivatives that are substrates for thermostable DNA polymerases Angew. Chem. Int. Ed. 37 (20): 2872-2875 (1998)	
	CI	Synthetic polynucleotides" Adv. Exp. Med. Biol. 240: 65-74 (1988)
	CO	Synthetic RNA homopolymers" Exp. Lung. Res. 14: 85-99 (1988)
	CI	Smith, et al. "In vitro selection without intervening amplification" Angew. Chem. Int. Ed. 36(17): 1879-1881 (1997)
	CI	Soukup, G. et al. "Preparation of oligonucleotide-biotin conjugates with cleavable linkers" <i>Bioconjugate Chem.</i> 6: 135-138 (1995)
	CJ	Thiesen, H. and Bach, C. "Target detection assay(TDA): a versatile procedure to determine DNA binding sites as demonstrated on SP1 protein" <i>Nucleic Acids research</i> <b>18:</b> 3203-3209 (1990)
	Cl	Tuerk, C. and Gold, L. "Systematic evolution of ligands by exponential enrichment: RNA ligands to bacteriophage T4 DNA polymerase" <i>Science</i> <b>249</b> :505-510 (1990)
	CI	Tyagi, S. "Taking DNA probes into a protein world" <i>Nature Biotechnology</i> <b>14:</b> 947-948 (1996)
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WCG	1	Catalytic properties and capable of specific complex formation" <i>Molecular Biology</i> 27: 1-5 (1993)

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